Defense Manpower Data Center

Defense Enrollment Eligibility Reporting System/ Military Health System (DEERS/MHS)

Technical Specification
for
Patient ID Change Notification (PIDS Update)

Version 1.0
July 23, 2004

Document History

Document Version	Date	Change(s)
1.0	July 23, 2004	None (first external release, based on Draft 2.1.6)

Contents

1.0 Document Purpose

The Defense Manpower Data Center (DMDC) has been tasked to perform an architectural redesign of the Military Health System (MHS) TRICARE information system. This effort will be accomplished via the Defense Enrollment Eligibility Reporting System (DEERS), the MHS eligibility and enrollment database.

The DMDC and the TRICARE Management Activity (TMA) have created a number of documents defining the roles and responsibilities of each organization. The purpose of this document is to define the specifications for Patient ID Change Notification. The intended audiences for this document are Managed Care Support Contractors (MCSCs), the Designated Providers (DPs), the Pharmacy Data Transaction Service (PDTS), and the TRICARE Dual Eligible Fiscal Intermediary Contract (TDEFIC).

2.0 Referenced Documents

This Technical Specification references and/or contains information from Chapter 3 of the TRICARE Systems Manual (TSM).

3.0 Patient ID Change Notification Overview

The Patient ID (DOD_EDI_PN_ID) is the common identifier used to uniquely identify patients. Occasionally, based on incomplete or inaccurate person data provided to the DEERS Person Data Repository (PDR), a single person may be temporarily assigned two Patient IDs. DEERS will evaluate the two records and determine which one will become the Patient ID of record. Although DEERS will retain both identifiers for an indefinite period, only the one remaining ID will be used for that patient by DEERS after a conflict is resolved.

When this situation occurs, Patient ID Change history is made available via a "Publish and Subscribe" mechanism to all sites. Each site will need to merge the data gathered under the two separate Patient IDs under only one of the Patient IDs and to discard the other.

The Patient Identification Change Notification (PIDS Update) application provides DOD_EDI_PN_ID changes when requested. PIDS Update is an online synchronous transactional system that receives an inquiry, interrogates DEERS, and then returns a response to the originating system.

Customers may request:

- All DOD_EDI_PN_ID changes (Full Files), or
- DOD_EDI_PN_ID changes as of a specified date using LST_CHNG_RQST_DT. Customers will supply the LST_CHNG_RQST_DT (Incremental Files).

PIDS Update will return a file created from a change table. The return file contains the old DOD_EDI_PN_ID, the new DOD_EDI_PN_XR_ID, and the change date DEPI_CHNG_EFF_DT. The change date is provided to support incremental pulls, as well as for audit purposes. If multiple reconciliations occur, the DOD_EDI_PN_XR_ID with the most recent change date is the current effective DOD_EDI_PN_ID.

4.0 Technical Process Flow

Client systems send a request to PIDS Update. PIDS Update retrieves data from the database and returns a response to the client.
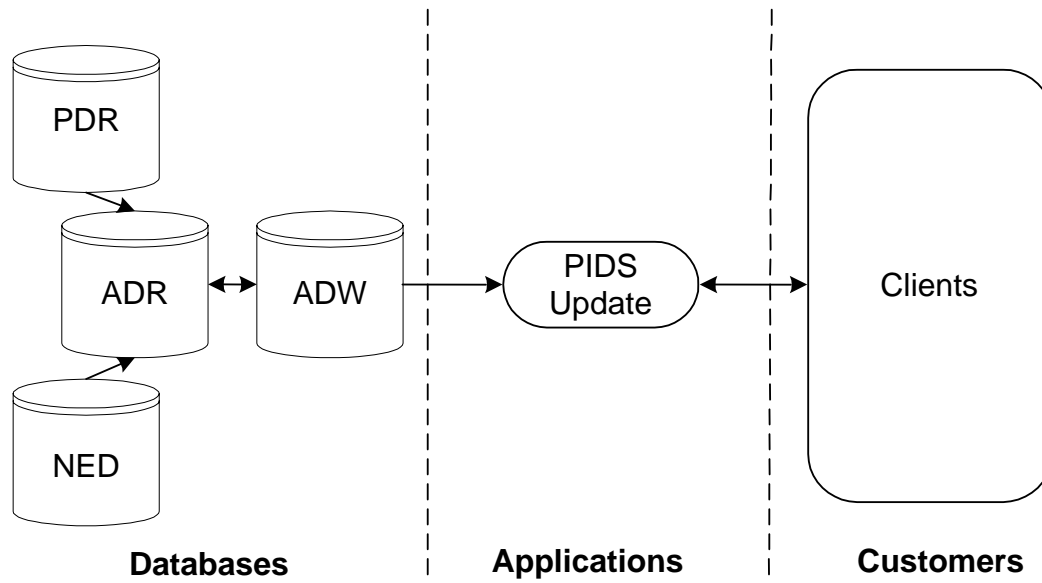
- PDR – Person Data Repository. The PDR database houses demographic details of all people in DEERS.
- NED – National Enrollment Database. NED houses all DEERS-related medical details for DEERS beneficiaries, including Plan enrollments, deductible payments, and other government program eligibility (such as Medicare).
- ADR – Authentication Data Repository. ADR is a current snapshot of selected PDR and NED data.
- ADW – Access Data Warehouse. ADW provides access to the ADR via Web Services. For clients using publish and subscribe services (i.e., PIDS Update) the ADW stages data for client pick up.
- PIDS Update. PIDs Update is an internal DMDC acronym for Patient ID Change Notification.

5.0 Security

The Patient ID Change Notification service uses the Military Health System (MHS) Virtual Private Network (VPN). The VPN will use encryption to provide a secure channel for data transmission. This VPN is entirely administered by MHS, including components that are physically located at an MCSC site. Initially, the System-to-System interface will be implemented with the VPN solution providing the encryption. The standard MHS VPN solution may change over time, and the MCSCs, TRRx, and DPs will upgrade and comply accordingly.

For MCSCs and DPs (but not TRRx initially), in addition to the VPN, all traffic will be routed through the Business-to-Business Gateway. This Gateway is entirely administered by MHS. The MCSCs and DPs are expected to provide information as required to support the Business-to-Business Gateway to MHS. The requirements for the Business-to-Business Gateway may change over time, and the MCSCs and DPs are expected to upgrade and comply accordingly.

The goal of TMA security administration is to minimize maintenance of user IDs and passwords across the network and to accommodate future security strategies through current procedures. All MCSCs, TRRx, and DPs shall comply with current DoD and MHS security requirements, as well as future enhancements based on technological advances that include, but are not limited to

Machine-to-Machine certification and authentication, Public Key Infrastructure (PKI), and other encryption options.

6.0 Communications

The Patient ID Change Notification service uses the following communications methods:

- The interface will use point-to-point connections with HTTP (Hypertext Transfer Protocol)
- The messages will be in SOAP/XML format

6.1 SOAP

Simple Object Access Protocol (SOAP) is a lightweight protocol for exchange of information in a decentralized, distributed environment. SOAP is an application protocol based on Extensible Markup Language (XML, see below), and it consists of three parts:

- An envelope that is the outermost element item in a SOAP message
- A header that represents the state of a transaction
- A body that contains information targeted at an ultimate SOAP receiver (customer)

For more information about SOAP, refer to http://www.w3.org/TR/SOAP/

6.2 XML

Extensible Markup Language (XML) is a simple, very flexible text format derived from SGML (ISO 8879). Originally designed to meet the challenges of large-scale electronic publishing, XML is also playing an increasingly important role in the exchange of a wide variety of data on the Web and elsewhere.

For more information about XML, refer to http://www.w3.org/XML/

7.0 Technical Requirements

The MCSC must comply with following technical requirements:

- ADW will be available 24x7 with the exception of a weekly maintenance window
- The interface will use point to point connections with HTTP (Hypertext Transfer Protocol)
- The messages will be in SOAP-XML format
- Transactions in PIDS Update will be processed synchronously
- Virtual Private Network (VPN) may be used between DMDC and customers

8.0 Identification

The primary identification for enrollment data is the Patient ID. See the TSM Chapter 3 for more information on identifiers.

9.0 Inputs

9.1 Inquiry Transfer Record Layout

Section Name	Level	No.	Attribute Name	Size	Column Name	Notes	Usage*
Header	1	1	Software Program Identifier	3	SWR_PGM_ID	162	R
		2	Software Program Version Identifier	5	SWR_PGM_VRSN_ID	PA1	R
		3	Customer System Identifier	5	CSTR_SYS_ID	From ADR/ ADW team	R
		4	Schema Number Text	40	SCHM_NM_TX	Use "Test" or "Production"	R
		5	Schema Version Short Label Text	5	SCHM_VRSN_SL_TX	1.0.4	R
Body	2	1	Last Change Request Date	8	LST_CHNG_RQST_DT	yyyymmdd	O

* R = Required field, O = Optional field, S = Situational field

9.2 Inquiry Samples

9.2.1 Inquiring for all PIDS Changes for Given Date

To inquire only for records from a given date, include the LST_CHNG_RQST_DT in the SOAP body as shown in the sample inquiry below.

```xml
<?xml version="1.0" encoding="UTF-8" ?>
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:xsi="http://www.w3.org/1999/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/1999/XMLSchema">
    <SOAP-ENV:Header>
        <Header xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xsi:noNamespaceSchemaLocation="d:\schema\qa7\xml\services\pidsup\schema\1.0.0\pidsupinq.xsd">
            <SWR_PGM_ID>162</SWR_PGM_ID>
            <SWR_PGM_VRSN_ID>PA1</SWR_PGM_VRSN_ID>
            <CSTR_SYS_ID>999</CSTR_SYS_ID>
            <SCHM_NM_TX>Production</SCHM_NM_TX>
            <SCHM_VRSN_SL_TX>1.0.4</SCHM_VRSN_SL_TX>
        </Header>
    </SOAP-ENV:Header>
    <SOAP-ENV:Body>
        <PIDSUpdate>
            <PIDSUpdateRecord>
                <LST_CHNG_RQST_DT>20040401</LST_CHNG_RQST_DT>
            </PIDSUpdateRecord>
        </PIDSUpdate>
    </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

9.2.2 Inquiring for all PIDS Changes on File

To make a full file inquiry, simply omit the <LST_CHNG_RQST_DT> tag.

```xml
<?xml version="1.0" encoding="UTF-8" ?>
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:xsi="http://www.w3.org/1999/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/1999/XMLSchema">
    <SOAP-ENV:Header>
        <Header xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
         xsi:noNamespaceSchemaLocation="d:\schema\qa7\xml\services\pidsup\schema\1.0.0\pidsupinq.xsd">
            <SWR_PGM_ID>162</SWR_PGM_ID>
            <SWR_PGM_VRSN_ID>PA1</SWR_PGM_VRSN_ID>
            <CSTR_SYS_ID>999</CSTR_SYS_ID>
            <SCHM_NM_TX>Production</SCHM_NM_TX>
            <SCHM_VRSN_SL_TX>1.0.4</SCHM_VRSN_SL_TX>
        </Header>
    </SOAP-ENV:Header>
    <SOAP-ENV:Body>
        <PIDSUpdate>
            <PIDSUpdateRecord>
            </PIDSUpdateRecord>
        </PIDSUpdate>
    </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

10.0 Outputs

10.1 Response Transfer Record Layout

Section Name	Level	No.	Attribute Name	Size	Column Name	Notes
Header	1	1	Software Program Identifier	3	SWR_PGM_ID	
		2	Software Program Version Identifier	5	SWR_PGM_VRSN_ID	
		3	Customer System Identifier	5	CSTR_SYS_ID	
		4	Schema Number Text	40	SCHM_NM_TX	
		5	Schema Version Short Label Text	5	SCHM_VRSN_SL_TX	
		6	System Return Status Code	1	SYS_RT_STAT_CD	
		7	System Return Code	5	SYS_RT_CD	
Body	2	1	DoD Electronic Data Interchange Person Identifier	10	DOD_EDI_PN_ID	Old Value
		2	DoD Electronic Data Interchange Person Cross-Reference Identifier	10	DOD_EDI_PN_XR_ID	New Value
		3	DoD Electronic Data Interchange Person Identifier Change Effective Date	8	DEPI_CHNG_EFF_DT	YYYYMMDD HH24:MI:SS

10.2 Response Samples

Whether a full file inquiry or an incremental inquiry is made, the XML response is identical.

```xml
<soap-env:Envelope xmlns:soap-env="http://schemas.xmlsoap.org/soap/envelope/">
    <soap-env:Header>
        <Header xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xsi:noNamespaceSchemaLocation=
        "d:\schema\qa7\xml\services\pidsup\schema\1.0.0\pidsupinq.xsd">
            <SWR_PGM_ID>162</SWR_PGM_ID>
            <SWR_PGM_VRSN_ID>PA1</SWR_PGM_VRSN_ID>
            <CSTR_SYS_ID>999</CSTR_SYS_ID>
            <SCHM_NM_TX>Production</SCHM_NM_TX>
            <SCHM_VRSN_SL_TX>1.0.4</SCHM_VRSN_SL_TX>
            <SYS_RT_STAT_CD>0</SYS_RT_STAT_CD>
            <SYS_RT_CD>0</SYS_RT_CD>
        </Header>
    </soap-env:Header>
    <soap-env:Body>
        <PidsUpdate>
            <PIDSUpdateRecord>
                <DOD_EDI_PN_ID>1136299561</DOD_EDI_PN_ID>
                <DOD_EDI_PN_XR_ID>1136936707</DOD_EDI_PN_XR_ID>
                <DEPI_CHNG_EFF_DT>20040323 09:58:40</DEPI_CHNG_EFF_DT>
            </PIDSUpdateRecord>
            <PIDSUpdateRecord>
                <DOD_EDI_PN_ID>1237225194</DOD_EDI_PN_ID>
                <DOD_EDI_PN_XR_ID>1237174930</DOD_EDI_PN_XR_ID>
                <DEPI_CHNG_EFF_DT>20040325 13:23:03</DEPI_CHNG_EFF_DT>
            </PIDSUpdateRecord>
            <PIDSUpdateRecord>
                <DOD_EDI_PN_ID>1237225216</DOD_EDI_PN_ID>
                <DOD_EDI_PN_XR_ID>1242183874</DOD_EDI_PN_XR_ID>
                <DEPI_CHNG_EFF_DT>20040325 13:23:03</DEPI_CHNG_EFF_DT>
            </PIDSUpdateRecord>
        </PidsUpdate>
    </soap-env:Body>
</soap-env:Envelope>
```

11.0 Error Codes

The following error values are currently defined:

System Return Status Code*	Error Description	Error Constant	MCSC Action/ Notes
0	Success	SUCCESS	None
4	No Success	NO_SUCCESS	Check System Return Code (see below)

* SYS_RT_STAT_CD

System Return Code**	Name	Description
0	SUCCESS_CD	Processing occurred successfully
14020	INVALID_SOAP_MSG	Client request is malformed and could not be validated for requested service. Should not occur once code is through unit testing
14030	VALIDATION_ERROR	Client request is not valid for the requested service. Should not occur if inquiries are made
14120	PROCESSING_ERROR	A general error occurred while processing request. Attempt at least 1 additional inquiry to see if the problem resolves itself, otherwise contact DEERS Support

** SYS_RT_CD